

	A	B	C	D	E	F	G	H	I	J	K	L																
1	UCL Statistics for Data Sets with Non-Detects																											
2																												
3	User Selected Options																											
4	Date/Time of Computation	7/30/2013 10:39:21 AM																										
5	From File	WorkSheet.xls																										
6	Full Precision	OFF																										
7	Confidence Coefficient	95%																										
8	Number of Bootstrap Operations	2000																										
9																												
10	Chlordane																											
11																												
12	General Statistics																											
13	Total Number of Observations	66		Number of Distinct Observations				59																				
14	Number of Detects	32		Number of Non-Detects				34																				
15	Number of Distinct Detects	32		Number of Distinct Non-Detects				27																				
16	Minimum Detect	0.117		Minimum Non-Detect				0.0438																				
17	Maximum Detect	0.825		Maximum Non-Detect				0.91																				
18	Variance Detects	0.0289		Percent Non-Detects				51.52%																				
19	Mean Detects	0.445		SD Detects				0.17																				
20	Median Detects	0.415		CV Detects				0.381																				
21	Skewness Detects	0.339		Kurtosis Detects				0.0558																				
22	Mean of Logged Detects	-0.891		SD of Logged Detects				0.44																				
23																												
24	Normal GOF Test on Detects Only																											
25	Shapiro Wilk Test Statistic	0.956		Shapiro Wilk GOF Test																								
26	5% Shapiro Wilk Critical Value	0.93		Detected Data appear Normal at 5% Significance Level																								
27	Lilliefors Test Statistic	0.134		Lilliefors GOF Test																								
28	5% Lilliefors Critical Value	0.157		Detected Data appear Normal at 5% Significance Level																								
29	Detected Data appear Normal at 5% Significance Level																											
30																												
31	Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs																											
32	Mean	0.295		Standard Error of Mean				0.0307																				
33	SD	0.218		95% KM (BCA) UCL				0.349																				
34	95% KM (t) UCL	0.347		95% KM (Percentile Bootstrap) UCL				0.347																				
35	95% KM (z) UCL	0.346		95% KM Bootstrap t UCL				0.344																				
36	90% KM Chebyshev UCL	0.388		95% KM Chebyshev UCL				0.429																				
37	97.5% KM Chebyshev UCL	0.487		99% KM Chebyshev UCL				0.601																				
38																												
39	Gamma GOF Tests on Detected Observations Only																											
40	A-D Test Statistic	0.659		Anderson-Darling GOF Test																								
41	5% A-D Critical Value	0.747		Detected data appear Gamma Distributed at 5% Significance Level																								
42	K-S Test Statistic	0.147		Kolmogorov-Smirnov GOF																								
43	5% K-S Critical Value	0.156		Detected data appear Gamma Distributed at 5% Significance Level																								
44	Detected data appear Gamma Distributed at 5% Significance Level																											
45																												
46	Gamma Statistics on Detected Data Only																											
47	k hat (MLE)	6.224		k star (bias corrected MLE)				5.661																				
48	Theta hat (MLE)	0.0716		Theta star (bias corrected MLE)				0.0787																				
49	nu hat (MLE)	398.3		nu star (bias corrected)				362.3																				
50	MLE Mean (bias corrected)	0.445		MLE Sd (bias corrected)				0.187																				
51																												
52	Gamma Kaplan-Meier (KM) Statistics																											
53	k hat (KM)	1.833		nu hat (KM)				242																				
54	Approximate Chi Square Value (242.00, α)	207		Adjusted Chi Square Value (242.00, β)				206.3																				
55	5% Gamma Approximate KM-UCL (use when n>=50)	0.345		95% Gamma Adjusted KM-UCL (use when n<50)				0.347																				
56																												
57	Gamma ROS Statistics using Imputed Non-Detects																											
58	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs																											
59	GROS may not be used when kstar of detected data is small such as < 0.1																											
60	For such situations, GROS method tends to yield inflated values of UCLs and BTVs																											
61	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates																											
62	Minimum	0.117		Mean				0.325																				

